

**REMARKS**

Claims 1-7 and 10-15 are currently being cancelled in lieu of claims 16-24 to fix unintentional typographical errors in the claims previously submitted, modify the claims to conform to U.S. practice, and to further particularly point out and distinctly claim what Applicant regards as the inventive subject matter.

These amendments do not introduce new matter within the meaning of 35 U.S.C. §132.

**1. Election/Restrictions**

The Office Action states,

This application contains claims directed to the following patentably distinct species: various metallocene compound of formula (I). The species are independent or distinct because they are not obvious variations of each other.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a)

During a telephone conversation with Attorney Ashley Pezzner on May 10, 2006 a provisional election was made with traverse to elect rac-dimethylsilanediybis(2-methyl-4,5-benzindenyl)zirconium dichloride, claims 1-7 and 10-15. Affirmation of this election must be made by applicant in replying to this Office Action. The rest of the metallocene compound species are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### RESPONSE

Applicant affirms the election made on May 10, 2006 to provisionally elect species rac-dimethylsilanediybis(2-methyl-4,5-benzindenyl)zirconium dichloride. New claims 16-24 are readable thereon.

Additionally, Applicant respectfully traverse the Examiner's species election. In particular, the restriction requirement is traversed because it omits "an appropriate explanation" as to the existence of a "serious burden" if a restriction were not required. See MPEP 803. Regardless of any differences that may exist between the metallocene species within formula (I), a complete and thorough search for the selected species set forth above would require searching the art areas appropriate to the other species as well. Since a search of each of the species would be coextensive, it would not be a serious burden upon the Examiner to examine the entire scope of the currently pending claims in this application.

Further at the Examiner's disposal are powerful electronic search engines providing the Examiner with the ability to quickly and easily search the entire scope of all the currently pending

claims. Considering that the Examiner will undertake a search for the above elected species, searching for the other species of formula (I) would be minimally burdensome on the Examiner.

Moreover, Applicant have paid a filing fee for an examination of all the claims in this application. If the Examiner refuses to examine the full scope of the claims paid for when filing this application and persists in requiring Applicant to file a divisional application for the group of non-elected or withdrawn species, the Examiner would essentially be forcing Applicant to pay duplicative fees for the non-elected or withdrawn species, inasmuch as the original filing fees for the claims (which would be later prosecuted in a divisional application) are not refundable.

In view of the foregoing, Applicant respectfully requests the Examiner to reconsider and withdraw the restriction, and to examine the entire scope of all of the claims pending in this application.

## **2. Rejection of Claims 6, 7, and 10 Under 35 U.S.C. §112**

The Office Action states,

Claims 6, 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 6, the use of the term "obtainable" renders the claim ambiguous because a skilled artisan cannot assess whether the catalyst is actually obtained by the process of claim 1.

**RESPONSE**

Claims 6, 7, and 10 have been cancelled rendering the above rejection moot. Accordingly, Applicant kindly requests the Examiner to withdraw this rejection.

**3. Rejection of Claims 1-4, 6, 7 and 10-15 Under 35 U.S.C.**

**§102(b)**

The Office Action states that claims 1-4, 6, 7 and 10-15 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,339,128 (herein referred to as "Nakayama, et al."), U.S. Patent 5,968,864 (herein referred to as "Shamshoun, et al."), and WO 01/46274 (herein referred to as "Suhm, et al."). In particular, the Office Action states,

The instant claims are directed to a catalyst, a process of making said catalyst comprising a) combining a support such as silica with aluminoxane and subsequently (b) adding the reaction product of a metallocene compound such as rac-dimethylsilanediybis(2-methyl-4,5-benzindenyl)zirconium dichloride and alkylaluminum, and a polymerization process of using said catalyst.

Nakayama's examples 7 and 8 (cols. 21-22) demonstrate catalyst preparation and polymerization processes comprising contacting silica and methyl aluminoxane to provide an aluminoxane treated silica support, subsequently contact the support with dimethylsilanediybis(2-methyl-4,5-benzindenyl)zirconium dichloride and triisobutylaluminum and propylene. Nakayama's teaching meets the limitations of the instant claims.

Similar rejection is made over Shamshoun's teaching, see col. 8, line 25 to col. 9, line 11.

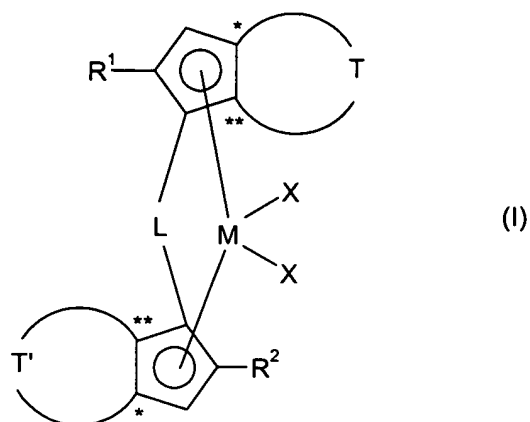
Similar rejection is made over Suhm's teaching of paragraphs [0311] to [0313] on page 14.

**RESPONSE**

Claims 1-4, 6, 7, and 10-15 have been cancelled rendering the above rejection moot. Notwithstanding, for a reference to anticipate an invention, all of the elements of that invention must be present in the reference. The test for anticipation under section 102 is whether each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. V. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicant respectfully believes Nakayama, et al., Shamsoun, et al., and Suhm, et al. fail to disclose, teach, or suggest, "A process for preparing a catalyst solid for olefin polymerization comprising a finely divided support, an aluminoxane, a metallocene compound product, and an organometallic compound, wherein the process comprises

- combining the finely divided support with the aluminoxane to form a modified support, and subsequently
- reacting a metallocene compound of formula (I),



where

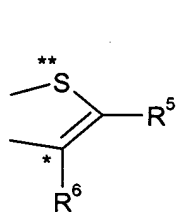
M is zirconium, hafnium or titanium;

X are identical or different and are each, independently of one another, hydrogen or halogen or a group -R, -OR, -OSO<sub>2</sub>CF<sub>3</sub>, -OCOR, -SR, -NR<sub>2</sub> or -PR<sub>2</sub>, where R is linear or branched C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>3</sub>-C<sub>20</sub>-cycloalkyl which may bear one or more C<sub>1</sub>-C<sub>10</sub>-alkyl radicals as substituents, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>7</sub>-C<sub>20</sub>-alkylaryl or C<sub>7</sub>-C<sub>20</sub>-arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds, with the two radicals X also being able to be joined to one another;

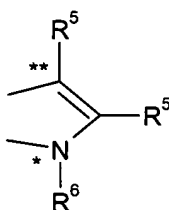
L is a divalent bridging group selected from the group consisting of C<sub>1</sub>-C<sub>20</sub>-alkylidene, C<sub>3</sub>-C<sub>20</sub>-cycloalkylidene, C<sub>6</sub>-C<sub>20</sub>-arylidene, C<sub>7</sub>-C<sub>20</sub>-alkylarylidene and C<sub>7</sub>-C<sub>20</sub>-arylalkylidene radicals which may contain heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or is a silylidene group having up to 5 silicon atoms;

$R^1$  and  $R^2$  are identical or different and are each, independently of one another, hydrogen or linear or branched  $C_1$ - $C_{20}$ -alkyl or  $C_3$ - $C_{20}$ -cycloalkyl which may bear one or more  $C_1$ - $C_{10}$ -alkyl radicals as substituents,  $C_6$ - $C_{20}$ -aryl,  $C_7$ - $C_{40}$ -alkylaryl or  $C_7$ - $C_{40}$ -arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds;

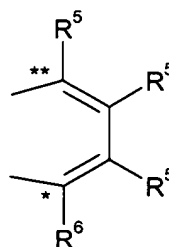
T and T' are divalent groups of the formulae (II), (III), (IV), (V), (VI) or (VII),



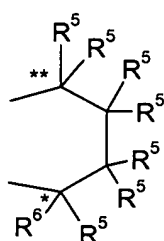
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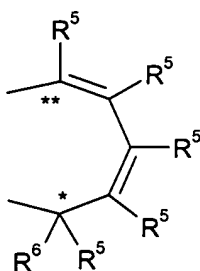
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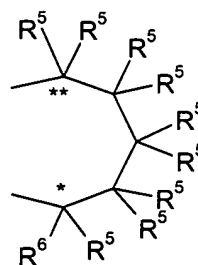
(IV)



(V)



(VI)



(VII)

where

the atoms denoted by the symbols \* and \*\* are in each case joined to the atoms of the compound of the formula (I) which are denoted by the same symbol; and

$R^5$  and  $R^6$  are identical or different and are each, independently of one another, hydrogen or halogen or linear or branched  $C_1$ - $C_{20}$ -alkyl or  $C_3$ - $C_{20}$ -cycloalkyl which may bear one or more  $C_1$ - $C_{10}$ -alkyl radicals as substituents,  $C_6$ - $C_{40}$ -aryl,  $C_7$ - $C_{40}$ -alkylaryl or  $C_7$ - $C_{40}$ -arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds or two radicals  $R^5$  or  $R^5$  and  $R^6$  are joined to one another to form a saturated or unsaturated  $C_3$ - $C_{20}$  ring;

with at least one organometallic compound of formula (VIII)



where

$M^1$  is an alkali metal, an alkaline earth metal or a metal of group 13 of the Periodic Table;

$R^7$  is hydrogen,  $C_1$ - $C_{10}$ -alkyl,  $C_3$ - $C_{10}$ -cycloalkyl,  $C_6$ - $C_{15}$ -aryl, alkylaryl or arylalkyl each having from 1 to 10 carbon atoms in the alkyl part and from 6 to 20 carbon atoms in the aryl part;

$R^8$  and  $R^9$  are each hydrogen, halogen,  $C_1$ - $C_{10}$ -alkyl,  $C_3$ - $C_{10}$ -cycloalkyl,  $C_6$ - $C_{15}$ -aryl, alkylaryl, arylalkyl or alkoxy each having from 1 to 10 carbon atoms in the alkyl part and from 6 to 20 carbon atoms in the aryl part;

$r$  is an integer from 1 to 3;



and

s and t are integers from 0 to 2, where the sum  $r+s+t$  corresponds to the valence of  $M^3$ ; wherein the organometallic compounds of formula (VIII) comprise at least one branched alkyl radical comprising up to 10 carbon atoms, or a cycloalkyl radical comprising from 3 to 10 carbon atoms;

to form a metallocene compound product which is added to the modified support, wherein the process is carried out in a suspension, and the suspension medium is removed by evaporation after the metallocene compound of formula (I) is reacted with the at least one organometallic compound of formula (VIII)."

In particular, Applicant believes Nakayama, et al., Shamshoun, et al., and Suhm, et al. fail to disclose, teach, or suggest a process for preparing a catalyst solid comprising: (i) a finely divided support; (ii) an aluminoxane; (iii) a metallocene compound product; and (iv) an organometallic compound, wherein the catalyst solid is produced by a suspension process, with the suspension medium being removed after the modified support is combined with the metallocene compound product and organometallic compound to produce the solid catalyst.

In light of the above, claims 16-24 are therefore believed to be patentable over Nakayama, et al., Shamshoun, et al., and Suhm, et al. Accordingly, reconsideration and withdrawal of the rejections are requested.

**4. Rejection of Claim 5 Under 35 U.S.C. §103(a)**

The Office Action states that claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,339,128 (herein referred to as "Nakayama, et al.") and WO 01/46274 (herein referred to as "Suhm, et al."). In particular, the Office Action states,

Nakayama and Suhm are relied upon as shown above. It is noted the cited prior art does not expressly teach contacting metallocene and the trialkyl aluminum prior to contacting the alumoxane treated support. It is noted that metallocene complex of the cited prior art are chlorinated metallocene which often has poor solubilities in hydrocarbons, the chlorinated metallocenes are routinely treated with alkyl aluminum before use to provide the alkylated metallocene with improved solubilities in the reaction media.

Thus, it would have been obvious to a skilled artisan at the time the invention was made to employ treat the chlorinated metallocene complex with alkyl aluminum to provide an alkylated metallocene with improved solubility in the reaction media to provide a supported catalyst with minimized unsupported metallocene and thus reduce fouling during the polymerization process and in the absence of any showing criticality and unexpected results. When the alkylated metallocene prepared by treating the chlorinated metallocenes with alkyl aluminum is used to prepare the catalyst composition, the teaching of the cited prior art meets the limitation of the instant claims.

**RESPONSE**

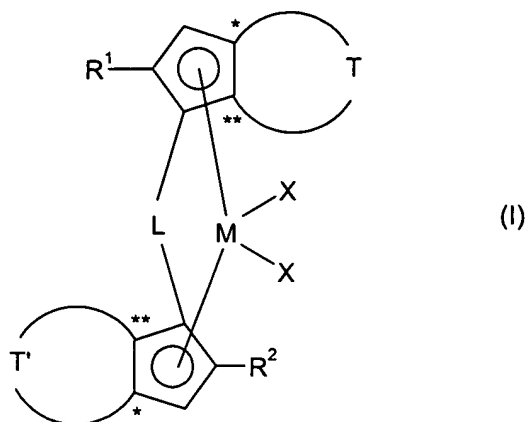
Claim 5 has been cancelled rendering the above rejection moot. Notwithstanding, the U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under § 103 by (1) determining the scope and content of the prior

art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness.

To establish a *prima facie* case of obviousness, the Examiner must establish: (1) that some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) that the prior art references teach or suggest all the claim limitations. Amgen, Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970).

As discussed *supra*, Applicant respectfully believes Nakayama, et al. and Suhm, et al. fail to disclose, teach, or suggest, "A process for preparing a catalyst solid for olefin polymerization comprising a finely divided support, an aluminoxane, a metallocene compound product, and an organometallic compound, wherein the process comprises

- combining the finely divided support with the aluminoxane to form a modified support, and subsequently
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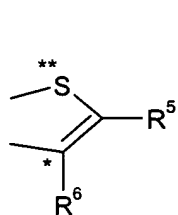
M is zirconium, hafnium or titanium;

X are identical or different and are each, independently of one another, hydrogen or halogen or a group -R, -OR, -OSO<sub>2</sub>CF<sub>3</sub>, -OCOR, -SR, -NR<sub>2</sub> or -PR<sub>2</sub>, where R is linear or branched C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>3</sub>-C<sub>20</sub>-cycloalkyl which may bear one or more C<sub>1</sub>-C<sub>10</sub>-alkyl radicals as substituents, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>7</sub>-C<sub>20</sub>-alkylaryl or C<sub>7</sub>-C<sub>20</sub>-arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds, with the two radicals X also being able to be joined to one another;

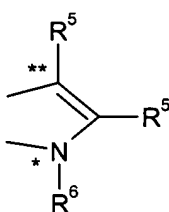
L is a divalent bridging group selected from the group consisting of C<sub>1</sub>-C<sub>20</sub>-alkylidene, C<sub>3</sub>-C<sub>20</sub>-cycloalkylidene, C<sub>6</sub>-C<sub>20</sub>-arylidene, C<sub>7</sub>-C<sub>20</sub>-alkylarylidene and C<sub>7</sub>-C<sub>20</sub>-arylalkylidene radicals which may contain heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or is a silylidene group having up to 5 silicon atoms;

$R^1$  and  $R^2$  are identical or different and are each, independently of one another, hydrogen or linear or branched  $C_1$ - $C_{20}$ -alkyl or  $C_3$ - $C_{20}$ -cycloalkyl which may bear one or more  $C_1$ - $C_{10}$ -alkyl radicals as substituents,  $C_6$ - $C_{20}$ -aryl,  $C_7$ - $C_{40}$ -alkylaryl or  $C_7$ - $C_{40}$ -arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds;

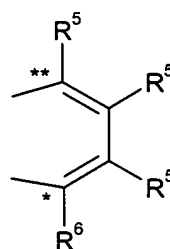
T and T' are divalent groups of the formulae (II), (III), (IV), (V), (VI) or (VII),



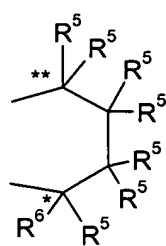
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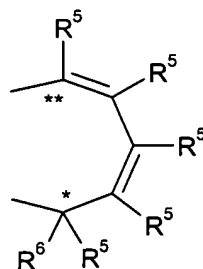
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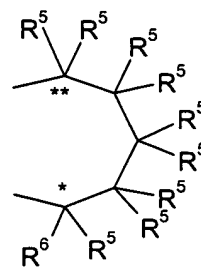
(IV)



(V)



(VI)



(VII)

where

the atoms denoted by the symbols \* and \*\* are in each case joined to the atoms of the compound of the formula (I) which are denoted by the same symbol; and

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with at least one organometallic compound of formula (VIII)



where

$M^1$  is an alkali metal, an alkaline earth metal or a metal of group 13 of the Periodic Table;

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$R^8$  and  $R^9$  are each hydrogen, halogen,  $C_1$ - $C_{10}$ -alkyl,  $C_3$ - $C_{10}$ -cycloalkyl,  $C_6$ - $C_{15}$ -aryl, alkylaryl, arylalkyl or alkoxy each having from 1 to 10 carbon atoms in the alkyl part and from 6 to 20 carbon atoms in the aryl part;

$r$  is an integer from 1 to 3;

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s and t are integers from 0 to 2, where the sum  $r+s+t$  corresponds to the valence of  $M^3$ ; wherein the organometallic compounds of formula (VIII) comprise at least one branched alkyl radical comprising up to 10 carbon atoms, or a cycloalkyl radical comprising from 3 to 10 carbon atoms;

to form a metallocene compound product which is added to the modified support, wherein the process is carried out in a suspension, and the suspension medium is removed by evaporation after the metallocene compound of formula (I) is reacted with the at least one organometallic compound of formula (VIII)."

In particular, as discussed *supra*, Applicant believes Nakayama, et al. and Suhm, et al. fail to disclose, teach, or suggest a process for preparing a catalyst solid comprising: (i) a finely divided support; (ii) an aluminoxane; (iii) a metallocene compound product; and (iv) an organometallic compound, wherein the catalyst solid is produced by a suspension process, with the suspension medium being removed after the modified support is combined with the metallocene compound product and organometallic compound to produce the solid catalyst.

In light of the above, claims 16-24 are therefore believed to be patentable over Nakayama, et al. and Suhm, et al. Accordingly, reconsideration and withdrawal of the rejections are requested.

**5. Rejection of Claim 5 Under 35 U.S.C. §103(a)**

The Office Action states that claim 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,968,864 (herein referred to as "Shamshoun, et al."). In particular, the Office Action states,

Shamshoun's teaching is relied upon as shown above. It is noted that Shamshoun does not expressly teach the step of evaporating the suspension medium after the addition of both metallocene and the trialkyl aluminum to the alumoxane treated support. This is because only small amount of hexane is used in Shamshoun's working example when triisobutylaluminum is slurried with the aluminoxane treated silica supported metallocene. However, if too much of hexane were used when catalyst slurry is prepared, it would have been obvious to remove the excess amount of hexane for easy transportation unless there is showing of criticality and unexpected results.

**RESPONSE**

Claim 5 has been cancelled rendering the above rejection moot. Notwithstanding, the U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under § 103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness.

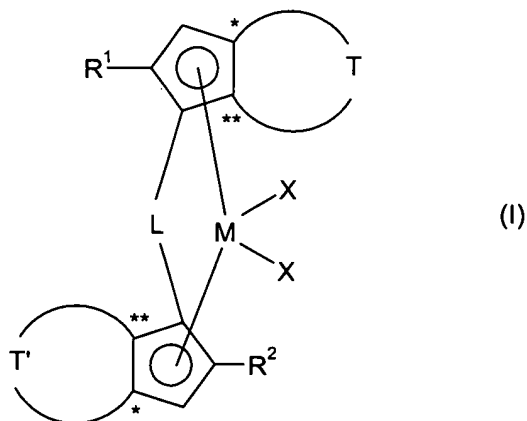
To establish a *prima facie* case of obviousness, the Examiner must establish: (1) that some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) that the prior art references teach or suggest all the claim



limitations. Amgen, Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970).

As discussed *supra*, Applicant respectfully believes Shamshoun, et al. fails to disclose, teach, or suggest, "A process for preparing a catalyst solid for olefin polymerization comprising a finely divided support, an aluminoxane, a metallocene compound product, and an organometallic compound, wherein the process comprises

- combining the finely divided support with the aluminoxane to form a modified support, and subsequently
- reacting a metallocene compound of formula (I),



where

M is zirconium, hafnium or titanium;

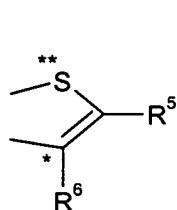
X are identical or different and are each, independently of one another, hydrogen or halogen or a group -R, -OR, -OSO<sub>2</sub>CF<sub>3</sub>, -OCOR, -SR,

-NR<sub>2</sub> or -PR<sub>2</sub>, where R is linear or branched C<sub>1</sub>-C<sub>20</sub>-alkyl, C<sub>3</sub>-C<sub>20</sub>-cycloalkyl which may bear one or more C<sub>1</sub>-C<sub>10</sub>-alkyl radicals as substituents, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>7</sub>-C<sub>20</sub>-alkylaryl or C<sub>7</sub>-C<sub>20</sub>-arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds, with the two radicals X also being able to be joined to one another;

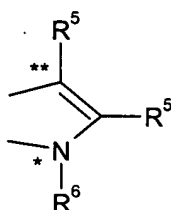
L is a divalent bridging group selected from the group consisting of C<sub>1</sub>-C<sub>20</sub>-alkylidene, C<sub>3</sub>-C<sub>20</sub>-cycloalkylidene, C<sub>6</sub>-C<sub>20</sub>-arylidene, C<sub>7</sub>-C<sub>20</sub>-alkylarylidene and C<sub>7</sub>-C<sub>20</sub>-arylalkylidene radicals which may contain heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or is a silylidene group having up to 5 silicon atoms;

R<sup>1</sup> and R<sup>2</sup> are identical or different and are each, independently of one another, hydrogen or linear or branched C<sub>1</sub>-C<sub>20</sub>-alkyl or C<sub>3</sub>-C<sub>20</sub>-cycloalkyl which may bear one or more C<sub>1</sub>-C<sub>10</sub>-alkyl radicals as substituents, C<sub>6</sub>-C<sub>20</sub>-aryl, C<sub>7</sub>-C<sub>40</sub>-alkylaryl or C<sub>7</sub>-C<sub>40</sub>-arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds;

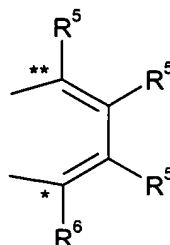
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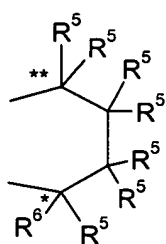
(II)



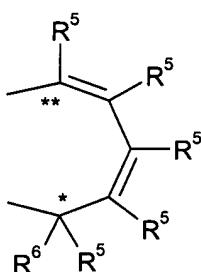
(III)



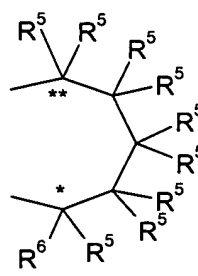
(IV)



(V)



(VI)



(VII)

where

the atoms denoted by the symbols \* and \*\* are in each case joined to the atoms of the compound of the formula (I) which are denoted by the same symbol; and

$R^5$  and  $R^6$  are identical or different and are each, independently of one another, hydrogen or halogen or linear or branched  $C_1$ - $C_{20}$ -alkyl or  $C_3$ - $C_{20}$ -cycloalkyl which may bear one or more  $C_1$ - $C_{10}$ -alkyl radicals as substituents,  $C_6$ - $C_{40}$ -aryl,  $C_7$ - $C_{40}$ -alkylaryl or  $C_7$ - $C_{40}$ -arylalkyl and may contain one or more heteroatoms from groups 13 - 17 of the Periodic Table of the Elements or one or more unsaturated bonds or two radicals  $R^5$  or  $R^5$  and  $R^6$  are joined to one another to form a saturated or unsaturated  $C_3$ - $C_{20}$  ring;

with at least one organometallic compound of formula (VIII)



where

$M^1$  is an alkali metal, an alkaline earth metal or a metal of group 13 of the Periodic Table;

$R^7$  is hydrogen,  $C_1$ - $C_{10}$ -alkyl,  $C_3$ - $C_{10}$ -cycloalkyl,  $C_6$ - $C_{15}$ -aryl, alkylaryl or arylalkyl each having from 1 to 10 carbon atoms in the alkyl part and from 6 to 20 carbon atoms in the aryl part;

$R^8$  and  $R^9$  are each hydrogen, halogen,  $C_1$ - $C_{10}$ -alkyl,  $C_3$ - $C_{10}$ -cycloalkyl,  $C_6$ - $C_{15}$ -aryl, alkylaryl, arylalkyl or alkoxy each having from 1 to 10 carbon atoms in the alkyl part and from 6 to 20 carbon atoms in the aryl part;

$r$  is an integer from 1 to 3;

and

$s$  and  $t$  are integers from 0 to 2, where the sum  $r+s+t$  corresponds to the valence of  $M^1$ ; wherein the organometallic compounds of formula (VIII) comprise at least one branched alkyl radical comprising up to 10 carbon atoms, or a cycloalkyl radical comprising from 3 to 10 carbon atoms;

to form a metallocene compound product which is added to the modified support, wherein the process is carried out in a

suspension, and the suspension medium is removed by evaporation after the metallocene compound of formula (I) is reacted with the at least one organometallic compound of formula (VIII)."

In particular, as discussed *supra*, Applicant believes Shamshoun, et al. fails to disclose, teach, or suggest a process for preparing a catalyst solid comprising: (i) a finely divided support; (ii) an aluminoxane; (iii) a metallocene compound product; and (iv) an organometallic compound, wherein the catalyst solid is produced by a suspension process, with the suspension medium being removed after the modified support is combined with the metallocene compound product and organometallic compound to produce the solid catalyst.

In light of the above, claims 16-24 are therefore believed to be patentable over Shamshoun, et al. Accordingly, reconsideration and withdrawal of the rejection is requested.

#### CONCLUSION


Based upon the above remarks, the presently claimed subject matter is believed to be novel and patentably distinguishable over the references of record. The Examiner is therefore respectfully requested to reconsider and withdraw all rejections and allow all pending claims 16-24. Favorable action with an early allowance of the claims pending in this application is earnestly solicited.

The Examiner is welcomed to telephone the undersigned practitioner if she has any questions or comments.

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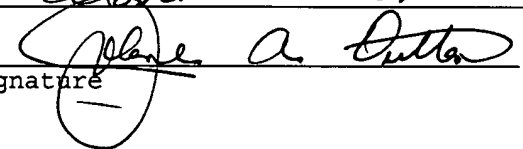
Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on

October 20 2006  
  
Signature

October 20 2006  
Date